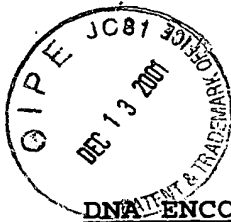


EXHIBIT B



Dkt. 54002-D/JPW/JHB

DNA ENCODING A GABA_B2 POLYPEPTIDE AND USES THEREOF

5 BACKGROUND OF THE INVENTION

10 This application is a continuation-in-part of U.S. Serial No. 09/ , filed November 4, 1998 which is a continuation-in-part of PCT International Application No. PCT/US98/22033, filed October 16, 1998 which is a continuation-in-part of U.S. Serial No. 09/141,760, filed August 27, 1998, which is a continuation-in-part of U.S. Serial No. 08/953,277, filed October 17, 1997, the contents of which are hereby incorporated by reference into the subject application.

20 Throughout this application, various references are referred to within parentheses. Disclosures of these publications in their entireties are hereby incorporated by reference into this application to more fully describe the state of the art to which this invention pertains. Full bibliographic citation for these references may be found at the end of this application, preceding the sequence listing and the claims.

30 Gamma amino butyric acid (GABA) is the major inhibitory neurotransmitter in the nervous system. Three families of receptors for this neurotransmitter, GABA_A, GABA_B, and GABA_C, have been defined pharmacologically and genetically. GABA_B receptors were initially discriminated by their sensitivity to the drug baclofen (Bowery, 1993). This and their dependency on G-proteins for effector coupling distinguishes them from the ion channel-forming GABA_A and GABA_C receptors. Principle molecular targets of GABA_B receptor activation are Ca⁺⁺ and K⁺ channels whose gating is directly modulated by the liberation of G-protein that follows the binding of the neurotransmitter to its receptor (Misgeld et al. 1995; Krapivinsky et al., 1995a). In